KOVTUNENKO, M.P., inzh.; GROYSER, M.V.; GRODSKIY, Ye.Ya.; SMIRNOV, V.M.; MAKAROV, V.I.

Use of reinforced concrete structures of plant manufacture. Gidr. i mel. 16 no.6:47-52 Je '64. (MIRA 17:9)

1. Goszemvodkhoz RSFSR (for Kovtunenko). 2. Volgogradvodstroy (for Groyser, Makarov). 3. Nauchnoissledovatel'skiy institut sel'skogo stroitel'stva (for Grodskiy). 4. Yuzhnyy gosudarstvennyy institut po proyektirovaniyu vodokhozyaystvennogo i meliorativnogo stroitel'stva (for Smirnov).

KOVTUNENKO, M.V.

USSR/ Cosmochemistry. Geochemistry. Hydrochemistry D.

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11547

Author : Borisov N.V., Subbota M.I., Morozova S.N., Kovtunenko M.V.
Inst : All-Union Scientific Research Institute of Geological Prospecting for Petroleum
Title : Hydrogen in Marsh- and Other Gases

Orig Pub : Tr. Vses. n.-i. geol.-razved. neft. in-ta, 1955, 6, 165-175

Abstract : An instrument for determination of H_2 (accuracy 0.02%), is proposed, and a detailed description is given of its use for the analysis of natural gases. Data are presented on the analysis of 11 samples of marsh gas wherein H_2 was detected by means of the described instrument. Concentration of H_2 reached only 0.3% with a content of heavy hydrocarbons $\leq$ 0.03 - 0.01%. In gases of mud volcanoes the H_2 content was $\leq$ 0.06%

Card 1/1

KOVTUNENKO, N.P., inzhener.

Mechanizing the removal and sifting of coal-pulverizing mill balls. Elek.sta. 25 no.12:43 D '54. (MLRA 7:12)
(Milling machinery) (Coal, Pulverized)

KOVTUNENKO, P.I.; PAVLOVA, N.N.

Testing mechanical properties of rocks by the dynamic pressing-in method. Izv.vys.ucheb.zav.; neft' i gaz. no.7:29-35 '58.
(MIRA 11:11)

1. Moskovskiy neftyanoy institut im. akad. I.M. Gubkina i institut nefti AN SSSR.

(Rocks--Testing)

KOVTUNENKO, P. I., Cand. Tech. Sci. (diss) "Influence of Speed of Charging on Mechanical Properties of Mining Rocks During Dynamite Implosion," Moscow, 1961, 14 pp. (Moscow Inst. Petrol. Engr. and Gas Industry) 300 copies (KL Supp 12-61, 268).

KOVTUNENKO, P. V., Aspirant

"Concentrations of Excess Barium in an Oxide Cathode." Cand Tech Sci, Moscow (Order of Lenin) Chemicotechnological Inst imeni D. I. Mendeleyev, 24 Nov 54. (VM, 12 Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

9,3120
26.1640

25972
S/539/60/000/031/005/014
E071/E135

AUTHORS: Kovtunenko, P.V., Kondakov, B.V., and Tsarev, B.M.

TITLE: On the chemical methods of determination of free alkali earth elements in effective thermocathodes made on the basis of compounds of these metals

PERIODICAL: Moscow. Khimiko-tekhnologicheskiy institut. Trudy, No.31, 1960. Issledovaniya v oblasti khimii i tekhnologii elektrovakuumnykh materialov. pp. 36-45

TEXT: Despite the considerable number of experimental works, the problem of concentration of the excess of an alkali earth metal in an oxide cathode, particularly its dependence on various factors and its influence on the operation of the cathode, is not sufficiently clear. The appearance of a number of new types of cathode, the nature of which cannot be established without experimental investigation of the concentration and evaporation of excessive alkali earth elements, made the problem particularly important. For the above reason, the present authors surveyed papers published on this subject. As the concentration of the

Card 1/ 5

On the chemical methods of ....

excess of the alkali earth metal in an oxide cathode is of the order of 0.002-0.5 mole % the usual chemical methods are inapplicable and the determination is based either on the determination of the oxygen evolved (if the formation of the excess of the metal from its oxide is accompanied by the evolution of oxygen) or on the consumption of specially introduced gas, capable of combining with the metal. The following methods are described: a) after the usual treatment of the vacuum system, the cathode is activated by drawing the emission current. The oxygen evolved is pumped into a preliminarily evacuated volume and its amount measured with a compression manometer, after which some hydrogen is introduced and reacted with the oxygen. The water formed is frozen out and the measurement of the pressure is repeated. The difference in pressure is ascribed to oxygen. b) Based on the amount of oxygen necessary to transfer the free metal into its oxides. c) Based on a treatment of the activated cathode with water ($Me + H_2O = MeO + H_2$ or $Me + 2H_2O = Me(OH)_2 + H_2$) and measuring the amount of hydrogen evolved. The special feature of this method, proposed in 1932 by T.P. Bardennikova, is

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On the chemical methods of ....

the active reaction with water not only with the excess metal but also with oxides of alkali earth elements from which the cathode is made ($BaO + H_2O = Ba(OH_2)$). This destroys the cathode, but the total excess of the free metal, i.e. not only present on the surface but also in the lattice of the oxide, is measured. d) Based on the reaction of the metal with nitrogen at 200-600 °C forming nitride (Ba_3N_2). On subsequent treatment of the cathode with water, the nitride formed is decomposed with the evolution of ammonia which is determined colorimetrically. e) Based on the reaction between the hot metal and carbon dioxide ($Ba + CO_2 = BaO + CO$). From the point of view of sensitivity, all methods with the exception of d) are approximately similar and their accuracy depends on the accuracy of the determination of the pressure of the gaseous product. However, the method c) is the most accurate. With the authors' apparatus [not described] it is possible to measure quantities of $3\text{-}5 \times 10^{-9}$ g of barium. The necessary precautions to obtain good results with this method are described in some detail (degassing of the glass and water, prevention of penetration of substances capable of reacting with water into the analytical system, e.g. material of

Card 3/5

On the chemical methods of ....

the base of the electrode and of the preheater). On the basis of the reaction with water, the authors developed a method of separate determination of barium present in the cathode and barium evaporated from it. A number of glass caps with a piece of iron hermetically sealed in each (to enable their transfer by a magnet) are placed in the vacuo system. At a given time such a cap is placed over the cathode and barium evaporating during the heat treatment condenses on the cap. Subsequently at a given time, the cap is transferred by a magnet into the analytical system for the water treatment and a new cap is put over the cathode. This method can be used for studies of the velocity of evaporation of alkali earth elements from any cathodes from which these metals evaporate. A simultaneous application of this type of analysis with the spectral analysis enables the determination of the rate of evaporation not only of the alkali earth metals but also of their oxides. The method is sufficiently reliable for the determination of the "equilibrium" concentration of alkali earth metals which is established in a cathode after a given time and given operating conditions.

Card 4/5

25972
S/539/60/000/031/005/014
E071/E135

On the chemical methods of ....

A.V. Morozov and A.I. Mel'nikov are mentioned for their contribution in this field.
There are 2 tables and 19 references: 7 Soviet, 1 German and 11 English. The four most recent English language references read as follows:

Ref.8: L.A. Wooten, G.E. Moore, W.G. Guldner, J. Appl. Phys., V.26, 8, 937 (1955).
Ref.9: G.E. Moore, L.A. Wooten, J. Morrison. J. Appl. Phys., V.26, 8, 943 (1955).
Ref.10: G. Zibowitz. J. Am. Chem. Soc., V.75, 1501 (1953).
Ref.17: E.S. Rittner. Philips Res. Rep., V.8, 184, (1953).

Card 5/5

25974
S/539/60/000/031/007/014
E073/E335

9,3120

AUTHORS: Kovtunenko, P.V., Kondakov, B.V. and Nikonov, B.P.

TITLE: On Disturbing the Stoichiometry of Calcogenides of Alkali Earth Metals During Heat-treatment in Vacuo

PERIODICAL: Moscow. Khimiko-tekhnologicheskiy institut. Trudy. No. 31. Moscow, 1960. Issledovaniya v oblasti khimii i tekhnologii elektrovakuumnykh materialov, pp. 50 -54

TEXT: Using a method of T.P. Berdennikov a quantitative determination was made of the non-stoichiometric barium forming in barium oxide, sulphide and selendie during heat-treatment in vacuo. It was found that under otherwise equal conditions the concentration of the non-stoichiometric barium increased in the following order: BaO; BaS and BaSe. According to data published by V. Grattidge and G. John in Ref. 1 (Russian translation published in Sb. Problemy sovremennoy fiziki, IL, 3, 113, 1954) and B.P. Nikonov and

Card 1/3

9,3120
5.2200

25975
S/539/60/000/031/008/014
E021/E406

AUTHORS: Kovtunenko, P.V., Kondakov, B.V., Morozov, A.V. and Mel'nikov, A.I.

TITLE: Evaporation of alkaline earth metals from cathodes prepared on a barium-calcium tungstate base

PERIODICAL: Moscow. Khimiko-tekhnologicheskiy institut. Trudy, No.31, 1960. Issledovaniye v oblasti khimii i tekhnologii elektrovakuumnykh materialov, pp.55-59

TEXT: The rate of evaporation of alkaline earth metal from pressed cathodes prepared from refractory salts of these metals is important. The cathodes used in the present investigation were prepared by pressing a mixture of tungsten, aluminium and barium-calcium tungstate into a molybdenum cylinder at a pressure of 20 tons/cm^2 and sintering at 1950°C. As the cathode is used at 1100 to 1200°C free alkaline earth metal is formed as follows:

$$2Ba_3WO_6 + 6Al = 3Ba + 2W + 3BaAl_2O_4$$

Some of the free barium formed immediately evaporates and the rest migrates along the emitter and evaporates gradually. The

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Evaporation of alkaline earth ...

apparatus used to determine the rate of evaporation was a high-vacuum system and the minimum quantity of barium which could be detected was 5×10^{-9} g. After evacuating the apparatus, the cathode was activated for 30 minutes at 1150 to 1200°C and then the rate of evaporation of barium was determined. Fig.4 shows typical curves of the rate of evaporation of Ba (in g/hr) against time of working of the cathode (hours). The rate of evaporation is highest in the first few hours. With increased time, the rate decreases and tends to a constant value. There are 4 figures, 2 tables and 4 references: 3 Soviet and 1 non-Soviet. The reference to an English language publication reads as follows: E.S.Rittner, W.C.Rutledge, R.H.Ahlert, J.Appl.Phys., 28, No.12, 1468 (1957).

Card 2/3

9.3120
26.2531

S/109/62/007/009/012/018
D409/D301

AUTHORS: Kovtunenko, P.V., Morozov, A.V., Mel'nikov, A.I., and Gusakov, V.V.

TITLE: Evaporation of alkaline-earth metals from rhenium-barium cathodes

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 9, 1962, 1593 - 1597

TEXT: The authors studied the rate of evaporation of barium and of barium oxide from rhenium-barium cathodes, as a function of the period of operation of the cathode; the change in the emission properties of the cathode was also studied. The present investigation was prompted by the satisfactory results, obtained in replacing tungsten by rhenium as a cathode material. It was found that the new (rhenium-barium) cathode gives the same emission-current density (5-6 A/cm^2) as the tungsten-barium cathode, while operating at lower temperatures; the total rate of evaporation of barium (or of calcium from its base) and of its compounds, is of the same order of magnitude as that from tungsten-barium cathodes. The rate of

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evaporation of the free barium (calcium), was determined by a chemical method, described by the authors in an earlier work. The total amount of free barium and of its oxides was determined by a spectral method, developed by S.A. Savostin. The experiments were conducted by means of an experimental diode with a watercooled copper-anode. It was found that the rate of evaporation of alkaline-earth metals from cathodes which belong to different lots, may differ greatly from lot to lot; this is apparently due to the previous history of the specimens. The dependence of the rate of evaporation on the period of operation, is the same for rhenium-barium cathodes as for tungsten-barium cathodes. It was found that in many cases, but not always, a drop in the rate of evaporation is accompanied by a drop in emission; this indicates the need for further experimental evidence. The fraction of free barium, evaporated from the cathode, did not exceed 10 % of the total amount of evaporated barium; but the amount of barium which is oxidized during the process, was not determined in the experiments. There are 4 figures and 1 table.

SUBMITTED: March 19, 1962

Card 2/2

KONDAKOV, B.V.; KOVTUNENKO, P.V.; BUNDEL', A.A.

Equilibria between the gaseous and condensed phases in the BaO - H_2O system. Zhur. fiz. khim. 38 no.1:190-196 Ja'64. (MIRA 17:2)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

L 3807-66 EWT(m)/ETC/EWG(m)/T DS

ACCESSION NR: AP5017666 UR/0109/65/010/007/1300/1305

621.385.735.019.31

19

B

AUTHOR: Nikonov, B. P.; Kovtunenko, P. V.

TITLE: Thermal dissociation of alkali-earth-metal chalcogenides and the life of oxide-coated cathodes

SOURCE: Radiotekhnika i elektronika, v. 10, no. 7, 1965, 1300-1305

TOPIC TAGS: oxide coated cathode

ABSTRACT: The results are reported of an experimental investigation of the effect of thermal treatment in vacuum upon the composition of Ba, Ca, Sr compounds with O, S, Se chalcogens. An electrolytically pure nickel base was coated with $BaSO_4$, $BaSeO_3$, $BaCO_3$, $CaCO_3$, or $SrCO_3$ 80—100-micron thick layer and heated to 1050, 850, or 600C. The excess Ba content in BaO was measured before and after its spraying at different temperatures. It was found that vacuum calcination results in the formation of nonstoichiometric compounds

Card 1/2

L 3807-66
ACCESSION NR: AP5017666

with deficient metalloids; the composition and properties of these compounds last as long as the initial chalcogenide is in sufficient supply. Both the initial activation and the preservation of activity under operating conditions are ensured by the process of thermal dissociation. Orig. art. has: 4 figures and 2 formulas.

ASSOCIATION: none

SUBMITTED: 09Apr64 ENCL: 00 SUB CODE: EC, IC, GC

NO REF SOV: 011 OTHER: 012

Card 2/2

(A) L 10513-66 EWT(l)/EWT(m)/EPF(n)-2/EWP(t)/EEC(d)/EWP(b)/ETC(m) IJP(c)

ACC NR: AP5027174 JD/HW SOURCE CODE: UR/0076/65/039/010/2445/2449

AUTHOR: Kondakov, B. V.; Kovtunenko, P. V.; Bundel', A. A.

ORG: Moscow Chemical Engineering Institute im. D. I. Mendeleyev (Moskovskiy khimiko-tekhnologicheskiy institut)

TITLE: Deviations from stoichiometry arising spontaneously in barium oxide crystals

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 10, 1965, 2445-2449

TOPIC TAGS: barium oxide, barium, thermal decomposition, STOICHIOMETRY, CRYSTAL

ABSTRACT: When barium oxide is heated to 900—1150C in a vacuum at a residual pressure of (1—2) 10^{-7} mm Hg, excess barium is formed spontaneously. No less than 90% of the barium formed is localized on the crystal surface. This formation is apparently due to thermal dissociation. A barium content that is constant at given temperature corresponds to an equalization of the rates at which it is formed and driven off. At 1150C, such a constant barium content is established in 4 to 5 min and amounts to 1.92 x 10^{-6} g-at Ba/mole BaO. At high temperatures, contact between barium oxide and nickel alloyed with silicon and calcium causes the separation of free barium at the interface. The rate at which the barium is driven out of the site of its formation is determined by a slow transport through the oxide layer; this causes a marked increase in the amount of barium on the oxide-metal interface. Orig. art. has: 3 figures, 2 tables, and 1 formula.

SUB CODE: 07, 20 / SUBM DATE: 03Jul64 / ORIG REF: 006 / OTHER REF: 008

Card 1/1 UDC 541.17

KONDAKOV, B.V.; KOVTUNENKO, P.V.; BUNDEL', A.A.

Spontaneously appearing disarrangements of stoichiometry in barium oxide crystals. Zhur.fiz.khim. 39 no.10:2445-2449 O '65. (MIRA 18:12)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva. Submitted July 3, 1964.

L 06254-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6031958 SOURCE CODE: UR/0051/66/021/003/0322/0324

AUTHOR: Kovtunenko, S. I.; Sobolev, V. V.

42
34
13

ORG: none

TITLE: Reflection spectra of Ge, InSb, GaSb, InAs and GaP

SOURCE: Optika i spektroskopiya, v. 21, no. 3, 1966, 322-324

TOPIC TAGS: reflection spectrum, germanium single crystal, indium compound, gallium compound, antimonide, arsenide, phosphide, semiconductor crystal

ABSTRACT: The report deals with the reflection spectra in the range of 1-6 eV of Ge and InSb dendrites, specular spalls of GaSb and InAs, and GaP wafers obtained by transport reactions. All the specimens had perfect specular surfaces 2 x 4 mm^2 in area and impurities in the amount of the order of 10^{16} cm^{-3}. The data obtained were compared with earlier data and led to the following conclusions. In etched crystals, the intensity of the shortwave component of the observed doublet is always much lower than that of the longwave component, whereas in dendrites and spalls the intensities of both components of the doublet are approximately equal, and the doublet maximum is much more distinct than in etched samples. In the latter as well as in polished and etched crystals, the relative intensity distribution between the maxima may change from one sample to the next, but the position of the maxima in the spectrum remains unchanged. New findings made in the study include the observation of reflection peaks

Card 1/2 UDC: 535.312:535.33:548.0

L 06254-67

ACC NR: AP6031958

8

of 1.44 eV (InSb), 1.68 and 1.38 eV (InAs) and 4.77 eV (GaP), and a more accurate determination (as compared to etched or polished crystals) of the spin-orbital splitting of the valence band at point L. The 1.44 eV (InSb), 1.68 and 1.38 eV (InAs) peaks are attributed to $L_{3'}$-L_1 transitions, and the 4.77 and 3.76 eV (GaP) peaks, to Γ_{15v}-Γ_{15c} and $L_{3'}$ - L_1 or Λ_3 - Λ_1 transitions. Authors are deeply grateful to V. N. Maslov, N. M. Demenkov, S. V. Tsivinskiy, M. Ya. Dashevskiy, I. I. Burdiyan, N. I. Luzhnaya, A. I. Koppel' and A. Ya. Nashel'skiy for providing the specimens.
Orig. art. has: 3 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 15Jan66/ ORIG REF: 003/ OTH REF: 008

Card 2/2 egh

AUTHORS: Shevernitskiy, V.V., Kovtunenko, V.A. SOV-125-58-8-13/16

TITLE: The Effect of Local Heat Treatment of Transverse Butt Welds of Pipes on the Magnitude of Residual Stresses (Vliyaniye mestnoy termoobrabotki poperechnogo stykovogo shva trub na velichinu ostatochnykh napryazheniy)

PERIODICAL: Avtomaticheskaya svarka, 1958, Nr 8, pp 79-83 (USSR)

ABSTRACT: The described experiments were carried out solely for the purpose of determining the effect of local heat treatment on residual stresses in transverse butt-welded pipes for one special case (arc welding), without any attempt to determine the effect on the mechanical properties. From the experiments carried out on two kinds of specimens, it was concluded that in this specific case local heat treatment can be useful in reducing transverse residual stresses in transverse butt-welded pipe joints. In the case of butt-joined plates local heat treatment does not reduce residual stresses, as confirmed by work carried out by V.I. Novikov from the Institute of Electric Welding.
There are 5 diagrams, 1 table and 1 Soviet reference.

Card 1/2

SOV-125-58-8-13/16

The Effect of Local Heat Treatment of Transverse Butt Welds of Pipes on the Magnitude of Residual Stresses

ASSOCIATION: Institut elektrosvarki imeni Ye.O. Patona, AN USSR (Institute of Electric Welding imeni Ye.O. Paton, AS UkrSSR)

SUBMITTED: May 27, 1958

1. Welds--Heat treating

Card 2/2

KOVTUNENKO, V.A.

18(5) SOV/125-59-9-6/16

AUTHOR: Novikov, V.I., Candidate of Technical Sciences, Kovtunenko, V.A. and Shumitskiy, I.O., Engineers

TITLE: Joining of Pipe-Section Components Directly One to Another

PERIODICAL: Avtomaticheskaya svarka, 1959, Nr 9, pp 45-49 (USSR)

ABSTRACT: Pipe components can be joined either by means of connecting beams or by direct welding. This article considers the application of the second method which is particularly suitable for pipes of a small diameter (10 to 20 cm), or those pipes which considerably differ in their diameters. In Fig 1, three examples of pipes joined at different angles are given. In research, pipes of ø 89 x 4 mm and 129 x 4.5 mm were used as test-pieces; specifications of their chemical compositions and mechanical properties are given in Tables 1 and 2. Welding of test-pieces was performed by electrodes UONII-13/45 ø 4 and 5 mm. To test the welded joints strength, three

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Joining of Pipe-Section Components Directly One to Another

test-pieces of the form shown in Fig 2 were prepared. It has been found out that deformation of a transversally welded pipe diminishes, as its angle with the longitudinal pipe decreases; the pertaining figures are given in Tables 3 and 4. It is to be noted that research has been carried out on pipes welded on both sides of transversal pipe. The strut beams used in constructions are normally welded only on one side; however, all the above conclusions remain true, as the joints undergo the same stresses in both cases. There are 4 tables, 4 diagrams and 1 Soviet reference.

ASSOCIATION: 1) Ordena trudovogo krasnogo znameni institut elektrosvarki imeni Ye.O. Patona AN USSR (Order of the Red Banner of Labor Institute of Electric Welding imeni Ye.O. Paton AS Ukr SSR); (Novikov, Kovtunenko) 2)"Proyektstal'konstruktsiya" Ministerstva stroitel'stva USSR (Proyektstal'konstruktsiya of the Ministry of Construction,Ukr SSR) (Shumitskiy).

25(1) SOV/125-12-4-1/18

AUTHORS: Novikov, V.I., Candidate of Technical Sciences, Kovtunenko, V.A., and Shumitskiy, O.I., Engineers

TITLE: Fastening of Grating Tube Elements to Multiple "Joints"

PERIODICAL: Avtomaticheskaya svarka, 1959, Vol 12, Nr 4, pp 3-13 (USSR)

ABSTRACT: The authors describe the results of investigations on the static strength, at lower temperatures of different constructions, of fastening gratings to coil metal tube constructions. Experiments were made at especially low temperatures, -60°, because the joining should correspond to the climatic conditions in the northern and eastern parts of the country. Five samples of jointings were tested for rupture (Figure 2). The result was, that for two samples of which the front plates are thin, the indicated rupture stress is low (thickness 12 mm: 25.6 and 36.0 kg/mm^2) (Figure 9a,b). At samples, which had front-plates of 18 mm thickness, the indicated rupture stress reached the strength limit of the tube metal (50.5 and 53.6 kg/mm^2). At the

Card 1/2

Fastening of Grating Tube Elements to Multiple "Joints"

samples with front-plates of 24 mm thickness, the rupture was within the tube metal. The chemical consistancy of the used tube metal was given as: 0.17% C, 0.49% Mn, 0.27% Si, 0.12% Ni, 0.04% Cu, 0.035% S, 0.026% P. The measurements of the tubes were: diameter 127 mm, thickness 4.5 mm. The authors give as reference, investigations of "Proyektstal' konstruktsiya", [illegible], and the Factory of Metal Constructions imeni Babushkin, [illegible]epropetrovsk ([illegible]epropetrovskiy zavod metal[illegible]onstruktsiy im. Babushkina). There are 6 photographs and 7 diagrams.

ASSOCIATION: Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im. Ye. O. Patona AN USSR (Red Banner of Labor Institute of Electric Welding imeni Ye. O. Paton, AS UkrSSR) (Novikov, Kovtunenko)
"Proyektkonstruktsiya" Ministerstva Stroitel'stva USSR ("Proyektkonstruktsiya" of the UkrSSR Ministry of Construction) (Shumitskiy)

SUBMITTED: February 7, 1959

Card 2/2

S/125/60/000/012/003/014
A161/A030

AUTHORS: Shevernitskiy, V.V.; Kovtunenko, V.A

TITLE: Static Strength of Longitudinal, Transverse and Combination Welds in Joints from AMg6 Alloy

PERIODICAL: Avtomaticheskaya svarka, 1960, No. 12, pp. 22 - 27

TEXT: The AMg6 (AMg6) aluminum alloy is one of preferred structural aluminum alloys. The purpose of the investigation was to determine the variations in the strength of welds of this alloy with varying length and cross section area, and in different combinations of longitudinal and transverse fillet welds. The AMg6 alloy is not heat-susceptible. The composition of specimens used in tests was: 0.69% Mn; 6.86% Mg; 0.1% Si; 0.11% Fe; 0.02% Cu; 0.14% Ti. The shape of the specimens is shown (Fig. 3); a 300-ton "Baldwin" test machine was used for tests in room temperature. The test results are given in six tables. Conclusions: 1) The nominal destructive stresses in longitudinal fillet welds do not change with increasing length to 50 weld legs in 8 x 8 mm welds, and to 33 legs in 12 x 12 mm welds. No data have been obtained for longer welds. 2) In longitudinal 8 x 8 and 12 x 12 mm fillet welds the minimum nominal destructive stress is 15.0 kg/mm^2, and

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Static Strength of Longitudinal, Transverse and Combination Welds in Joints From AMg6 Alloy

this value can be used for calculations. 3) Transverse 12 x 12 mm fillet welds have a slightly higher strength than transverse 8 x 8 mm welds. But in the tests the welds were not fractured along the calculated plane, and a resistance value cannot yet be recommended for calculations. 4) In combined work of longitudinal and transverse fillet welds the nominal destructive stresses dropped, but further investigations are yet necessary before calculation values can be recommended.

ASSOCIATION: Ordena Trudovogo Krasnogo znameni Institut elektrosvarki im. Ye.O. Patona AN USSR (Electric Welding Institute "Order of the Red Banner of Labor" imeni Ye.O. Paton of the AS UkrSSR)

SUBMITTED: August 31, 1960

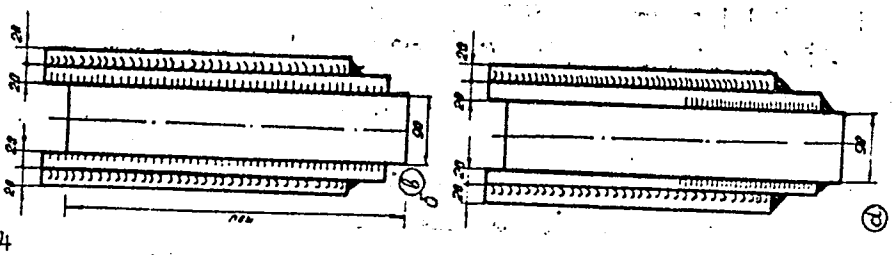
S125/60/000/012/003/014
A161/A030

Static Strength of Longitudinal, Transverse and Combination Welds in Joints From AMg6 Alloy

Figure 3:

Test specimens:

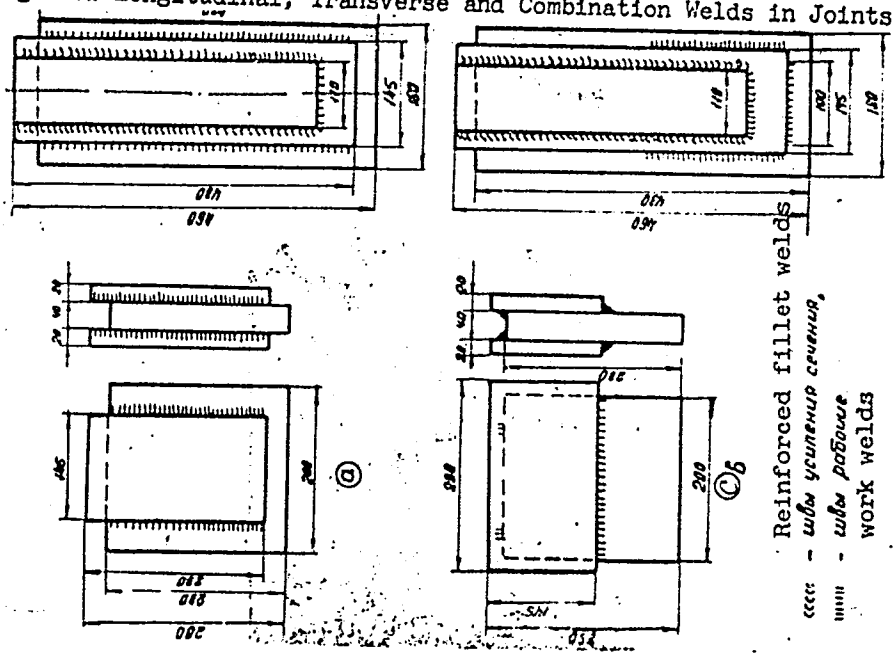
a) Specimen for lateral seams, type 4K with a length of 100 mm, 200 mm; face seams with a length of 100 mm, and combined seams with a length of 100 mm, of both the lateral and face seams; b) specimen for lateral seams with a length of 300 and 400 mm; c) specimen for face seams with a length of 200 mm; d) specimen for combined seams with lateral seams 200 mm long and face seams 100 mm long.



Card 3/4

S/125/60/000/012/003/014
A161/A030

Static Strength of Longitudinal, Transverse and Combination Welds in Joints From AMg6 Alloy.



Reinforced fillet welds
- швы усиления сечения,
- швы рабочие
work welds

Рис. 3. Образцы для испытаний:
а — тип образца для фланговых швов 4К, 100 мм, 200 мм, лобовых — для швов с длиной фланговых по 100 мм и лобовых — 100 мм; б — тип с длиной 300 и 400 мм; в — тип образца для лобовых швов длиной 200 мм; усиленных швов с длиной фланговых 200 мм и лобовых

Card 4/4

BDS
L 11215-63
ACCESSION NR: AP3000143 S/0125/63/000/005/0069/0074 50 48

AUTHOR: Kovlkov, V. I.; Kovtunenko, V. A. (see Association 1); Shumitskiy, O. I. (see Association 2)

TITLE: Some problems in designing and constructing an all-welded tower

SOURCE: Avtomaticheskaya svarka, no. 5, 1963, 69-74

TOPIC TAGS: Leningrad tv tower; 15KhSND steel

ABSTRACT: Methods, work, and materials used in construction of a 316.2-m high tv transmitting tower in Leningrad (completed in Dec. 1962) are described. The tower consists of a 200-m high hexagonal lattice trunk with a 60-m base and a 115.3-m high tetrahedral prism, "the antenna supporting section." Two high-speed elevators are provided. Rolled pipes up to 426 mm diameter were used. 15KhSND steel proved to be the most cold-proof and crack-resisting and, therefore, was used for principal members of the structure. All-welded prestressed design with reinforced junction plates between tubular members is claimed to be the most modern, economical, and reliable. The following organizations took part in designing and building the tower: Ukrproyektstal'konstruktsiya, Institute of Electric Welding AN UkrSSR, Lenproyekt, Dnepropetrovskiy zavod im. Babushkina (Dnepropetrovsk plant), Promstal'-konstruktsiya, and Sevzapstal'konstruktsiya. Orig. art. has: 4 figures.

Card 1/2 Inst. of Electric Welding

NOVIKOV, V.I.; KOVTUNENKO, V.A.

Stability of flanged joints strengthened with ribs. Avtom. svar. 17 no.3:50-54 Mr '64. (MIRA 17:11)

1. Institute elektrosvarki im. Ye.O. Patona AN UkrSSR.

NOVIKOV, V.I., kand. tekhn. nauk; KOVTUNENKO, V.A., inzh.

Pipe butt welds in metal structures. Svar. proizv. no.7:25-28 Jl '64. (MIRA 18:1)

1. Institut elektrosvarki im. Ye.O. Patona.

L 28471-66 EWP(k)/EWT(m)/T/EWP(w)/EWP(v)/EWP(t)/ETI IJP(c) JD/HM/HW

ACC NR: AP6010144 SOURCE CODE: UR/0125/66/000/003/0057/0060

AUTHOR: Novikov, V. I.; Kovtunenko, V. A.

46
44
B

ORG: Institute of Electric Welding im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR)

TITLE: Elimination of root cracks in annular welds

SOURCE: Avtomaticheskaya svarka, no. 3, 1966, 57-60

TOPIC TAGS: crack propagation, weld evaluation, butt welding, metal tube, welding inspection, steel/15KhSND steel

ABSTRACT: To assure strong and reliable tube joints, annular welds usually are performed by hand with the aid of backing rings. In joints of low-carbon and low-alloy steels, however, this leads to the rise of 2-3 mm long cracks (whiskers) in the weld root. They usually originate at the base of weld and propagate through the deposited metal or along the zone of fusion. In the more important structural elements such defects are impermissible. Hence, the authors investigated the origins of such cracks and the means of preventing them, on the basis of nine microsections with cracks formed during the welding of double- and single-vee joints of 15KhSND steel -- a steel which is often used in metal structures performing at low temperature and which is more crack-prone. The microsections were etched in nitric acid and examined at a magnifi-

Card 1/2 UDC: 621.791.053:620.191.32

cation of 1500; in all cases crystals intersected the cracks: this indicates that the cracks are of the cold and not of the hot type, contrary to the usual opinion. This conclusion is also confirmed by the absence of sulfides; as is known, sulfide inclusions and sulfide films are detected only for hot cracks. These findings give reason to believe that whisker-type cracks are occasioned by the angular deformation accompanying multi-pass butt welding. On the basis of a comparative subsequent investigation of the effect of welding techniques and joint geometry, it is established that these whisker-type cold cracks are, as it were, a continuation of the gap between the edges of the joint, due to incomplete penetration of the weld root when the clearance between the edges is smaller than 3 mm and the angle of skew of the edges is too high. These cracks can be avoided by maintaining the clearance between the edges at at least 3 mm, reducing the angle of skew of the edges by 1.5-2.0 mm and keeping the clamps of the backing ring outside rather than inside the tube. These conclusions apply to tubes with diameters of 380 and 430 mm and wall thickness of 20 and 26 mm; for tubes of high-strength steel with wall thickness exceeding 30 mm or with very thin walls these conclusions have yet to be verified. Orig. art. has: 7 figures, 1 table.

SUB CODE: 11, 13/ SUBM DATE: 21Sep65/ ORIG REF: 005

TSITSIN, N.V., akademik; CHERKASSKIY, Ye.S.; KOVTUNENKO, V.F.

Activated creolin of high concentration. Dokl.AN SSSR 145 no.1:147-150 Jl '62. (MIRA 15:7)

1. Glavnyy botanicheskiy sad AN SSSR.
(Creolin)

CHERKASSKIY, Ye.S.; KOVTUNENKO, V.F.; BUDARINA, T.D.; Prinimali uchastiye: MEIUA, N.K.; DOBROCHINSKAYA, I.B.; AZIYASHVILI, L.A.

Improved methodology of chromatographic determination of γ-hexachlorocyclohexane in activated creolin and oil. Biul. Glav. bot. sada no.54:94-101 '64. (MIRA 17:11)

1. Glavnyy botanicheskiy sad AN SSSR.

KOVTUNENKO, V.M., mekhanik

Changes in the organization of wood-supplying shops. Bum. prom. 35 no.6:9 Je '60. (MIRA 13:7)

1. Nemanskiy tsellyulozno-bumazhnyy kombinat.
(Neman--Wood-using industries)

PETROV, V.I.; KOLEROVA, N.V.; KOVTUNENKO, V.T.; SILAYEV, A.D.

Methodology of preparing an aqueous suspension of barium for X-ray examination of the gastrointestinal tract. Vestn. rent. i rad. 38 no.3:61-63 My-Je '63. (MIRA 17:7)

1. Iz rentgeno-radiologicheskogo otdela (rukovoditel' - prof. V.I. Petrov) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F. Vladimirskogo (direktor - zasluzhennyy vrach RSFSR P.M. Leonenko).

KOVTUNENKO, Ye.Yu., inzh.

Designing a two-limit electric-contact pickup of linear displacements with a high dynamic precision. Izv. vys. ucheb. zav.; mashinostr. no.5:80-83 '65.

(MIRA 18:11)

KOVTUNENKO, Ye.Yu., inzh.

Equipment for a dynamic precision test of electric contact transducers of linear dimensions. Izv. vys. ucheb. zav.; mashinostr. no.4:68-70 '65. (MIRA 18:5)

TREGUBOVA, A.S., st. inzh.; KARASENKO, A.P., inzh.; MARKOVA, A.V., st. tekhnik; NIKOLAYEVA, Z.A., st. tekhnik; KOVTUNENKO, Zh.I., tekhnik; PENKASS, Z.F., tekhnik; STOYAN, T.T., tekhnik; CHERVYACHENKO, V.A., tekhnik; YEFREMOV, N.V., red.; DEREVYANKO, G.S., tekhn. red.

[Manual on the supply of moisture available to basic farm crops in the Ukraine] Spravochnik po zapasam produktivnoi vlagi pod osnovnym sel'skokhozyaystvennymi kul'turami na Ukraine. Kiev, Gossel'khozizdat USSR, 1963. 547 p.
(MIRA 16:12)

1. Otdel agrometeorologii Kiyevskoy gidrometeorologicheskoy observatorii (for all except Yefremov, Derevyanko).
(Ukraine--Soil moisture)

SAMUS', T.Ya.; LUZINA, T.I.; KOVTUNENKO, Z.S.

Thermal processing systems of press molds in the manufacture of products from chip pulp. Bum. i der. prom. no.1:33-36 Ja-Mr '65. (MIRA 18:10)

Kovtunenko Z. Yu.

AUTHORS: Malenok, N. M., Kul'kina, S. D., Kovtunenko, Z. Yu. 79-2-33/64

TITLE: The Oxidation of Vinylacetylene-Hydrocarbons With Organic Hydroperoxides (Okisleniye vinilatsetilenovykh uglevodorodov organicheskimi gidroperekisyami).
V. The Oxidation of the 6,9-Dimethyltetradecadiene-5,9-ins-7, 4,7-Dimethyldecadien-3,7-ins-5 and 3,6-Diethyloctadiene-2,6-ins-4 With Acetylhydroperoxide (V. Okisleniye 6,9-dimetiltetradekadiyen-5,9-ina-7, 4,7-dimetildekadiyen-3,7-ina-5 i 3,6-dietiloktadiyen-2,6-ina-4 gidroperekis'yu atsetila).

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 2, pp. 428-434 (USSR).

ABSTRACT: In a previous paper it was found that in the oxidation dioxides are produced by the hydroperoxides of acetyl, from divinylacetylene hydrocarbons with ethylene bindings in α - position to the acetylene binding (-C=C-C C-C=C-), whereas the acetylene binding remains unchanged. This was confirmed by bromization. The three compounds mentioned in the title (I, II, III) obtained by the dehydration of the corresponding γ-acetyleneglycol were oxidized in order to confirm this. The oxidation process was observed volumetrically with an o. 1 n hyposulfite solution, whereas the bromization and syntheses were carried out according to usual methods. The dioxides of the following compounds:

Card 1/2

The Oxidation of Vinylacetylene-Hydrocarbons With Organic Hydro= 79-2-33/64
peroxides.
V. The Oxidation of the 6,9-Dimethyltetradecadiene-5,9-ins-7, 4,7-Dimethyldecadien -3,7-ins-5 and 3,6-Diethyloctadiene-2,6-ins-4 With Acetylhydroperoxide.

6,9-dimethyl-5,9-dioxydotetradecine-7, 4,7-dimethyl-3,7-dioxydodecine-5, 3,6-diethyl-2,6-dioxydooctine-4, and their derivatives. 6,9-dimethyl-9-acetoxy-5-oxydotetradecine-7-ol-10, 4,7-dimethyl-7-acetoxy-3-oxydodecine-5-ol-8, 3,6-diethyl-2-oxydooctine-4-diol-6,7 and 3,6-diethyl-2-oxydooctine-4-diol-6,7 and 3,6-diethyl-6-acetoxy-2-oxydooctine-4-ol-7 were obtained. In the hydrolysis of the dioxides (I and II) the erytrites: 6,9-dimethyl-tetradecine-7-tetraol-5,6,9,10 and 4,7-dimethyldecine-5-tetraol-3,4,7,8 were obtained.
There are 3 tables, and 6 references, 3 of which are Slavic.

ASSOCIATION: Minsk Medical Institute (Minskiy meditsinskiy institut).

SUBMITTED: February 8, 1957.

AVAILABLE: Library of Congress.

Card 2/2

BARDYSHEV, I.I.; CHERCHES, Kh.A.; KOVTUNENKO, Z.Yu.; KOKHANSKAYA, Zh.F.

Chromatographic analysis of resin acids in crude turpentine from Scotch pine (Pinus silvestris L.). Dokl.AN BSSR 4 no.10:421-423 '60. (MIRA 13:9)

1. Institut fiziko-organicheskoy khimii AN BSSR.
(Resin acids)

BELYAYEV, L.M., inzh.; ZELICHENOK, G.G., kand. tekhn. nauk; KOVTUNOV, A.B.; MAZO, L.I., inzh.; YAKOVLEV, V.N., inzh., red.; FRAYTSUZOV, Ya.L., inzh. red.; MOLYUKOV, G.A., inzh., red. izd-va; TIKHANOV, A.Ya., tekhn. red.

[Assembling hoisting and transportation machinery; a concise handbook] Montazh pod"emno-transportnykh mashin; kratkoe spravochnoe posobie. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 235 p. (MIRA 11:7)

(Hoisting machinery)

BELYAYEV, L.M., inzh.; ZELICHENOK, G.G., kand. tekhn. nauk; KOVTUNOV, A.V.; MAZO, L.I., inzh.; BAZHENOV, D.V., inzh., red.izd-va; SOKOLOVA, T.F., tekhn. red.

[Installation of hoisting and conveying machinery] Montazh pod"emno-transportnykh mashin; kratkoe spravochnoe posobie. [By]L.M.Beliaev i dr. Izd.2., ispr. i dop. Moskva, Mashgiz, 1963. 311 p. (MIRA 16:5)
(Hoisting machinery) (Conveying machinery)

Kovtunov, G.A.

KOVTUNOV, G.A., dotsent, kand.tekhn.nauk.

Nature of certain complications arising in drilling clay sections. (MIRA 10:10)
Neftianik 2 no.6:5-7 Je '57.
(Oil well drilling fluids)

KOVTUNOV, G.A.

Formation of fluid outlets and methods for combating them.
Trudy VNII no.17:131-141 '58. (MIRA 12:1)
(Petroleum engineering)

KARAYEV, A.K.; KOVTUNOV, G.A.

Introduce electric drills in southern regions. Azerb. neft. khoz. 37 11:24-25 N '58. (MIRA 12:3)
(Boring machinery)

KOVTUNOV, G. A.

11(4) PHASE I BOOK EXPLOITATION SOV/2428

Sidorov, Nikolay Aleksandrovich, and German Antonovich Kovtunov

Oslozhneniya pri burenii skvazhin; preduprezhdeniye, likvidatsiya (Complications in Well Drilling; Their Prevention and Elimination) Moscow, Gostoptekhizdat, 1959. 198 p. 4,200 copies printed.

Exec. Ed.: V. V. Isayeva; Tech. Ed.: I. G. Fedotova.

PURPOSE: This book is intended for engineers and technicians of drilling organizations.

COVERAGE: The book deals with the prevention and elimination of complications occuring in oil well drilling. Those caused by caving and contraction of oil well shafts resulting in tool sticking are described in detail. Causes of gas, petroleum, and water infiltration as well as the causes of erupting springs are analyzed. Measures taken to eliminate gushers are outlined. Suggestions on how to increase the drilling rate and to decrease the drilling cost are offered. No personalities are mentioned. There are 47 references: 45 Soviet and 2 English.

Card 1/3

SOV/5408

Complications in Well Drilling (Cont.)

TABLE OF CONTENTS:

Card 2/3

AVAILABLE: Library of Congress

TM/jb
10-21-59

Card 3/3

ASAN-NURI, A.O., red.; ZHUKHOVITSKIY, S.Yu., red.; KARASEV, A.K., red.; KOVTUNOV, G.A., starshiy nauchnyy sotrudnik, red.; SHTEYNER, S.I., red.; ISAYEVA, V.V., vedushchiy red.; POLOSINA, A.S., tekhn.red.

[Perfecting oil and gas drilling practices] Sovershenstvovanie tekhniki i tekhnologii bureniia na neft' i gaz; materialy. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 347 p. (MIRA 13:9)

1. Vserossiyskoye soveshchaniye rabotnikov bureniya, Krasnodar, 1958. 2. Rukovoditel' laboratorii promyvochnykh zhidkostey Krasnodarskogo filiala Vsesoyuznogo nauchno-issledovatel'skogo instrumental'nogo instituta (for Zhukhovitskiy). 3. Krasnodarskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instrumental'nogo instituta (for Kovtunov).

(Oil well drilling)

KARAYEV, A.K.; KOVTUNOV, G.A.

Practice of drilling wells with bits of reduced and small diameters. Neft. khoz. 38 no.4:37-41 Ap '60. (MIRA 14:8)
(Kuban--Rock drills)

KOVTUNOV, G.A., starshiy nauchnyy sotrudnik

Institute competent technical inspection. Neftianik 7 n.1:6-7 Ja '62. (MIRA 15:2)

1. Krasnodarskiy filial Vsesoyuznogo nefte-gazovogo nauchno-issledovatel'skogo instituta.
(Oil wells—Equipment and supplies)

KOVTUNOV, G.A.; SIDOROV, N.A.

Generalization of some problems of deep drilling practices in the Kuban. Trudy KF VNII no.9:3-11 '62. (MIRA 15:9)
(Kuban--Oil well drilling)

KOVTUNOV, G.A.

Some characteristics of gas well sinking. Trudy KF VNII no.9:25-31 '62. (MIRA 15:9)
(Gas wells)

KOVTUNOV, G.A.; SADON, M.I.

Failure of production strings in the Kuban fields. Nefteprom. delo no.8:21-26 '63. (MIRA 17:4)

1. Krasnodarskiy filial Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta.

KOVTUNOV, I.S.; MATVEYEV, V.A.; MONYAKIN, V.V.

Improving technical and operational data certificates for controlling the stability of roofs in i^2_3 longwalls in the "Nezhdannaya" Mine. Trudy NPI 101:87-95 '60. (MIRA 15:5)
(Stoping (Mining))

KOVTUNOV, P.M., slesar'

A simple improvement. Elek. i tepl. tiaga 4 no.10:23 O '60.
(MIRA 13:10)

1. Lokomotivnoye depo Samarkand.
(Diesel locomotives--Equipment and supplies)

KOVTUNOV, V. P.

Country : USSR K
Category: Forestry. Forest Management.

Abs Jour: RZhBiol., No 11, 1958, No 48759

Author : Kovtunov, V.P.
Inst : -
Title : The State and the Problems of Forestry in Carpatia.

Orig Pub: Lesn. kh-vo, 1957, No 12, 3-7

Abstract: No abstract.

Card : 1/1

KOVTUNOVA, L.G.

Incidence of trichomonal invasions in the cervix uteri, urethra, paraurethral spaces and rectum in women with vaginal trichomoniasis. Vop.okh.mat.i det. 2 no.3:79-80 My-Je '57. (MLRA 10:7)

1. Iz Rostovskogo oblastnogo nauchno-issledovatel'skogo instituta akusherstva i ginekologii
(TRICHOMONAS) (GENERATIVE ORGANS, FEMALE--DISEASES)

KOVTUNOVA, L.G.

Some changes in the composition of women's milk in hypolactation.
Vop.okh.mat. i det. 4 no.6:89 N-D '59. (MIRA 13:4)

1. Iz Rostovskogo nauchno-issledovatel'skogo instituta akusherstva i pediatrii Ministerstva zdravookhraneniya RSFSR.
(MILK, HUMAN)

KOVTUNOVA, L.G., nauchnyy sotrudnik

Prolaction therapy of early hypogalactia. Akush. i gin. 35 no.1:95-96 Ja-F '59. (MIRA 12:2)

1. Iz Rostovskogo nauchno-issledovatel'skogo instituta akusherstva i pediatrii (dir. - kand.med.nauk F.S. Baranovskaya; nauchnyy rukovoditel' - prof. P.Ya. Lel'chuk) Ministerstva zdravookhraneniya RSFSR.

(LACTATION DISORDERS, ther.
hypogalactia, prolactin ther. (Rus))
(PITUITARY GLAND, ANTERIOR, hormones,
prolactin, ther. of hypogalactia (Rus))

KOVTUNOVA, L. G., Cand Med Sci -- (diss) "Problem of the effect of prolactine on the lactation capacity of women in early hypogalactine." Rostov-na-Don, 1960. 22 pp; (Rostov-na-Don State Medical Inst); 300 copies; price not given; (KL, 17-60, 169)

KOVTUNOVA, L.G.

Proteins and dry residue of human milk in the treatment of hypogalactia with prolactin. Vop. okh. mat. i det. 6 no.4:62-67 Ap '61. (MIRA 14:6)

1. Iz Rostovskogo-na-Donu nauchno-issledovatel'skogo instituta akusherstva i pediatrii (dir. - kandidat meditsinskikh nauk F.S. Baranovskaya, nauchnyy rukovoditel' - prof. P.Ya. Lel'chuk).
(BREAST--DISEASES) (PROLACTIN) (MILK, HUMAN)

SHEYNBAUM, E.M., CHERNYSHEVA, P.I.; KOVTUNOVA, N.Ya.; YAKIMIS, Z.E.; STAKHO, A.S.; PONOMAREVA, T.D.

Duration of the usefulness of sterile solutions prepared in the pharmacy. Apt. delo 11 no.1:55-56 Ja-F '62. (MIRA 15:4)

1. Apteka Sochinskoy gorodskoy bol'nitsy No.2 i bakteriologicheskaya Laboratoriya Sochinskoy sanitarno-epidemiologicheskoy stantsii.
(SOLUTIONS (PHARMACY))

Z. D. KOVTUNOVA, R. A. SILIN

"Oscillation Spectrum of a Manetron Resonator System with Double Bilateral Straps" from Annotations of Works Completed at the State Union Sci. Res. Inst: Min. of Radio Engineering Ind.

So: B-3,080,964

KOVTUNOVICH, O. P. DECEASED 1963/4

SURGERY (1961)

KOVTUNOVICH, K. M.

Surgical treatment of acute thrombophlebitis. Nov. khir. arkh. no.3:23-26 '62. (MIRA 15:4)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. E. A. Sakfel'd) Stanislavskogo meditsinskogo instituta.

(PHLEBITIS)

KOVTUNOVICH, L.B.

Influence of X rays on the course of latent gas infection under experimental conditions. Zhur. mikrobiol. epid. i immun. 32 no.7: 82-87 Je '61. (MIRA 15:5)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(X RAYS--PHYSIOLOGICAL EFFECT) (GAS GANGRENE)

KOVTUNOVICH, L. G.

USSR/Medicine - Gas Gangrene

PA 216T22

Feb 53

"Modifiability of B. perfringens," L.A. Chernaya, M. I. Kaplina, L.G. Kovtunovich, Lvov Inst of Epidemiol and Microbiol

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 2, pp 76-[illegible]

By modifying the carbohydrate nutrition, stabe variants of avirulent and atoxic strains of B. perfringens were obtained.

KOVTUNOVICH, L. G.

Dissertation: "Comparative Study of the Immunogenic Properties of Deposited and Native Anatoxins of Perfringens and Edematiens in an Experiment." Cand Med Sci, First Moscow Order of Lenin Medical Inst, 24 May 54. Vechernyaya Moskva, Moscow, 13 May 54.

SO: SUM 284, 26 Nov 1954

KOVTUNOVICH, L.G.

Symbiosis of Clostridium tetani with Bac. sporogenes. Mikrobiol. zhur. 17 no.2:19-21 '55 (MLRA 10:5)

1. Iz L'vivs'kogo institutu epidemiologii, mikrobiologii i gigieni.

(CLOSTRIDIUM,
sporogenes, symbiosis with C. tetani) (Uk)
(CLOSTRIDIUM TETANI,
symbiosis with C. sporogenes) (Uk)

KOVTUNOVICH, L.G.

Significance of the time factor in the development of specific immunity. Zhur.mikrobiol.epid. i immun. 27 no.5:59-63 My '56. (MLRA 9:8)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny
(IMMUNE SERUMS
develop. in mice, time factor eff.)

KOVTUNOVICH, L. G.

USSR / Microbiology. Anaerobic Bacilli.

Abs Jour: Ref Zhur-Biol., No 16, 1958, 72213.

Author : Kovtunovich, L. G.
Inst : Not given.
Title : Immunization of Guinea Pigs By Deposited and Native Anatoxins of Porfringens.

Orig Pub: V. Sb.: Anaerbnyye infektsii. Kiyev, Gosmedizdat USSR, 1957, 54-60.

Abstract: No abstract.

Card 1/1

U.

USSR/General Problems of Pathology - Immunity.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98097

Author : Kovtunovich, L.G.
Inst :
Title : Influence of Medicinal Sleep, Caffeine and Bromide on Production of Antitoxic Immunity by Immunization of Experimental Animals with the Anatoxins Perfringens and Oedematiens.

Orig Pub : V. sb.: Anaerobnyye infektsii, Kiyev, Gosmedizdat USSR, 1957, 68-73.

Abstract : A depression of antitoxin production was noted in rabbits which were put under sodium amytal sleep 2 days prior to the 1st immunization with anatoxin Cl. perfringens or Cl. oedematiens, in the period between immunizations and during 10 days after the 2nd immunization. In guinea pigs, the introduction during 5 days of 0.05 g caffeine after reimmunization led to an increase of the coefficient of increase

Card 1/2

- 11 -

U.

USSR/General Problems of Pathology - Immunity.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98097

(CI) of the antitoxin titer (AT); increase of AT 5 days after revaccination, as compared to AT before revaccination way up to 4-5. Introduction of 0.5 g of bromide 1-2 times daily after revaccination also produced in the course of 5 days a lesser rise of CI than in the control (correspondingly 2& 2-4).

Card 2/2

KOVTUNOVICH, L. G.

Animals. Bacteria. Anaerobic Bacilli.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24105

were performed with BT of type A. It was shown that by this method it is possible in the course of 1-3 hours to find and typify small amounts of BT; the method turned out to be more sensitive than the biological test on white mice. It was possible to isolate the toxin in the blood of infected white mice, in the blood of sick humans as well as in infected products. However, the author notes that even in strict compliance with all methodological instructions, conflicting results sometimes occur and he recommends to retain the parallel exposure of BT in mice. -- Yu. Z. Gendon

Card 2/2

KOVTUNOVICH, L. G.

TYRKOVA, Ye. S.; MILENUSHKIN, Yu. I.; KOVTUNOVICH, L. G.; ZAKHVATKIN, S. V.

Out-of-town session devoted to the 40th anniversary of the Great October Socialist Revolution. Zhur.mikrobiol.epid. i immun. 28 no. 9:15 S '57. (MLRA 10:12)

(COMMUNICABLE DISEASES)

KOVTUNOVICH, L.G. (L'vov)

Effect of X irradiation of guinea pigs on agglutinin production.
Med.rad. 3 no.6:66 N-D '58. (MIRA 12:1)
(X RAYS--PHYSIOLOGICAL EFFECT)
(AGGLUTININS)

KOVTUNOVICH, L.G.

Effect of external or internal irradiation on the efficiency of antiperfringens serum. Med.rad. 4 no.7:59-62 Jl '59. (MIRA 12:9)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(CLOSTRIDIUM PERFRINGENS immunol.)
(RADIATION EFFECTS)

17(2) SOV/16-59-6-34/46

AUTHORS: Chernaya, L.A., Shablovskaya, Ye.A., Kovtunovich, L.G. and Kaplina, Z.I.

TITLE: The Variation of Clostridium Perfringens. II. The Variation of Clostridium perfringens During Prolonged Existence in the Body With Experimental Dormant Gas Gangrene Infection. Author's Summary.

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, Nr 6, pp 127-128 (USSR)

ABSTRACT: A study was made of the variation of Clostridium perfringens in the conditions of a dormant gas gangrene infection. The foci of the dormant infection were created in guinea pigs and white mice by administering the corresponding microbes in lanoline. At regular intervals bacteria were isolated and tested for variation. The tests revealed three types of bacterium: 1) typical bacteria in the S form; 2) bacteria with changed cultural, morphological and tinctorial properties and 3) bacteria with very pronounced changes in their properties (in extreme cases their virulency and toxigenicity could not be restored even by repeated passages in animals). In the first month 75% of the strains isolated were of Type I. In the 4-6th month 31.8% were of type III and only 8.9 - 10.9% of Type I. In the 7-12th month 47.8% of the strains were of Type III. Poly-

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The Variation of Clostridium Perfringens. II. The Variation of Clostridium Perfringens During Prolonged Existence in the Body With Experimental Dormant Gas Gangrene Infection. Author's Summary.

infection in conjunction with Staphylococci or Salmonella paratyphi C and D led to more pronounced and frequent variation than monoinfection with Clostridium perfringens alone (72.6% compared to 42.2%). No changes in the antigen structure of the varied strains was noted, although their agglutination reaction titer was one step higher than that of the original Clostridium perfringens serum. The tests showed, then, that prolonged existence of Clostridium perfringens in the body during dormant gas gangrene infection led to a weakening of all the bacterium's properties, but particularly its virulency and toxigenicity. In most cases, however, pathogenicity could be restored by passages through animals.

ASSOCIATION: L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny (L'vov Institute of Epidemiology, Microbiology and Hygiene)

SUBMITTED: February 10, 1958

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17 (10, 12) SOV/16-60-4-11/47

AUTHOR: Kovtunovich, L.G.

TITLE: The Effects of X-rays on Clostridium Perfringens Antitoxin Production in Guinea Pigs.

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, Nr 4, pp 47 - 52 (USSR)

ABSTRACT: The author made a study of Cl. perfringens antitoxin production in guinea pigs, subjected to X-ray irradiation in doses of 100 and 500 r. Irradiation of the animals for 3 - 24 hours before a single inoculation of depot Cl. perfringens toxoid had a marked depressive effect on antitoxin production, whereas irradiation 3 - 24 hours after the injection slightly enhanced antitoxin production. Irradiation for 3 hours before the second inoculation had no effect on antitoxin production; irradiation for 24 hours prior to second inoculation depressed production slightly, whereas irradiation for 3 - 24 hours after second inoculation enhanced antitoxin production. Irradiation of the animals with remote revaccination had a stimulating effect on antitoxin production, irrespective of the duration or dose of irradiation. Thus, the effect of X-rays was primarily determined by the period of irradiation and the number of

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The Effects of X-rays on Clostridium Perfringens Antitoxin Production in Guinea Pigs

injections of toxoid which had been given, and only to a lesser extent by the dose of radiation. Although depressing antitoxin production, irradiation had no effect on the body's immune response. The stimulation of antitoxin production by irradiation 3 - 24 hours after primary, secondary or remote revaccination was due to the use of massive doses of depot Cl. perfringens toxoid sorbed on aluminum phosphate.
There are 4 tables, 1 figure and 25 references, 6 of which are Soviet, 18 English and 1 French.

ASSOCIATION: L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny (Institute of Epidemiology, Microbiology and Hygiene, L'vov)

SUBMITTED: May 4, 1958

KOVTUNOVICH, L.G.

Changes in skin allergy under the influence of X rays in dormant gas infection. Med.rad. 5 no.4:85 Ap '60. (MIRA 13:12)
(ALLERGY) (GANGRENE)
(X RAYS—PHYSIOLOGICAL EFFECT)

KOVTUNOVICH, L.G.

Effect of roentgen rays on the production of Clostridium perfringens antitoxin in guinea pigs. Zhur. mikrobiol. epid. i immun. 31 no. 4:47-53 Ap '60. (MIRA 13:10)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(X RAYS—PHYSIOLOGICAL EFFECT) (CLOSTRIDIUM PERFRINGENS)
(TOXINS AND ANTITOXINS)

KOVTUNOVICH, L.G., SHABLOVSKAYA, Ye.A.

Method of obtaining blood from white rats. Biul. eksp. biol. i med. 50 no.7:117-120 Jl '60. (MIRA 14:5)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny (dir. - kand.med.nauk S.D.Klyuzko, nauchnyy rukovoditel'- prof. L.A.Chernaya). Predstavlena deystvitel'nym chlenom AMN SSSR V.V.Parinym.

(BLOOD--COLLECTION AND PRESERVATION)

KOVTUNOVICH, L.G. (L'vov)

Role of a depot substance on the production of Clostridium of perfringens antitoxin under conditions of total body irradiation. Med.rad. 6 no.8:72-74 Ag '61. (MIRA 14:8)
(RADIATION--PHYSIOLOGICAL EFFECT) (CLOSTRIDIUM PERFRINGESN) (TOXINS AND ANTITOXINS)

KOVTUNOVICH, L.G.

Sensitivity of the reaction of a diffuse precipitation in agar. Lab. delo 7 no.2:36-39 F '61. (MIRA 14:1)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny.
(TOXINS AND ANTITOXINS)

KOVTUNOVICH, L.G. [Kovtunovych, L.H.]

Variability of clostridium perfrigens isolated from foci of latent gas gangrene in irradiated animals. Mikrobiol.zhur. 23 no.1:62-66 '61. (MIRA 14:5)

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(CLOSTRIDIUM PERFRIGENS)
(X RAYS—PHYSIOLOGICAL EFFECT)

CHERNAYA, L.A., prof.; KOVTUNOVICH, L.G.; SAKHNOVSKAYA, G.K.

Large-scale immunization against tetanus. Sov. med. 25 no.9:94-97 S '61. (MIRA 15:1)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(UKRAINE--TETANUS)

KOVTUNOVICH, L.G.

Significance of the conditions for the formation of the antitoxin Cl. Perfrigens under the action of X rays. Zhur. mikrobiol. epid. i immun. 32 no.5:129 My '61. (MIRA 14:6)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(ANTIGENS AND ANTITOXINS)
(X RAYS—PHYSIOLOGICAL EFFECT)

KOVTUNOVICH, L.G. [Kovtunovych, L.H.]

Some data on bacteremia in guinea pigs following total-body irradiation with X-rays. Mikrobiol. zhur. 23 no.4:44-47 '61. (MIRA 15:4)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny.
(BACTEREMIA) (RADIATION--PHYSIOLOGICAL EFFECT)

KOVTUNOVICH, L.G.; SHABLOVSKAYA, Ye.A.

Interrelation between allergies and the level of tetanus antitoxic immunity. Biul. eksp. biol. i med. 52 no.11:85-88 N '61. (MIRA 15:3)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny (dir. - kand.med.nauk S.D. Klyuzko, nauchnyy rukovoditel' - prof. L.A. Chernaya). Predstavlena deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.
(TETANUS) (TOXINS AND ANTITOXINS) (ALLERGY)